Remarks

Claims 1 and 3-48 are pending following entry of the amendment herein. Claim 2 has been canceled and Claims 1, 2-5, 13 and 16 have been amended. A marked up version of the claim amendments is attached hereto and is captioned "Version with Markings to Show Changes Made." Support for the claim amendments and the election of claims for prosecution on the merits are discussed individually below.

Claim Amendments.

Claims 1, 2-5, 13 and 16 have been amended herein. Independent Claim 1 has been amended to clarify and streamline the claim language. Subparagraphs (a) to (d) have been amended to recite "nucleic acid sequence," which amendments are supported by the specification at page 17 (lines 9-10) which indicates that the polynucleotides of the invention encompass both DNA and RNA, stating: "The nucleic acid may be DNA, both genomic and cDNA, RNA or a hybrid . . .".

In addition, a new subparagraph (d) has been added to Claim 1 which recites "a nucleic acid sequence having at least 95% sequence identity to the nucleotide sequence of **SEQ ID NO:1**." This claim language is supported by the specification at page 19 (lines 24-27), which recites: "In general, sequences which code for proteins of the present invention and which hybridize to the DNA of SEQ ID NO:1 or SEQ ID NO:3 disclosed herein will be at least 75% homologous, 85% homologous, and even 95% homologous or more with SEQ ID NO:1 or SEQ ID NO:3, respectively."

Dependent Claims 3-5 and 13 have been amended to conform to the language of independent Claim 1.

Independent Claim 15 has also been amended merely to clarify and streamline the claim language.

Applicants note for the record that none of the amendments presented herein are narrowing in effect.

It is submitted that the claim amendments presented herein are supported by the specification as originally filed, and Applicants therefore respectfully request entry thereof.

Election of Claims.

In response to the Restriction Requirement, Applicants elect the claims of Group I (Claims 1-7 and 13-16, drawn to an isolated polynucleotide encoding ROC1, an expression vector, a cell, an antisense oligonucleotide, and a method for producing a protein) with traverse, as Applicants respectfully submit that it would not be an undue burden to examine the claims of Groups I-XII concurrently. In particular, Applicants respectfully submit that it would not present an undue burden to examine the claims of Groups I and II (in particular Claim 9) concurrently, as examination of the Group I claims will also involve a search of ROC1 proteins, including SEQ ID NO:2.

Conclusion.

Applicants respectfully submit that this application is in condition for substantive examination, which action is respectfully requested.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Sequence, Commissioner for Patents, Washington, DC 20231, on March 21, 2003.

Carey Gregory
Date of Signature: March 21, 2003

Version with Markings to Show Changes Made

Please amend the claims as follows:

1. (Amended) An isolated polynucleotide comprising a nucleic acid sequence encoding ROC1, said nucleic acid sequence [polynucleotide] selected from the group consisting of:

(a) a nucleic acid sequence [DNA] having the nucleotide sequence of **SEQ ID NO:1**;

(b) a nucleic acid sequence [polynucleotides] that hybridizes [hybridize] to the nucleic acid sequence [DNA] of (a) above under stringent conditions [and which encode ROC1]; [and]

(c) a nucleic acid sequence [polynucleotides] that differs [differ] from the nucleic acid sequence [DNA] of (a) or (b) above due to the degeneracy of the genetic code[, and that encode ROC1 encoded by a DNA of (a) or (b) above]; and

(d) a nucleic acid sequence having at least 95% sequence identity to the nucleotide sequence of **SEQ ID NO:1**.

3. (Amended) An isolated polynucleotide according to Claim 1, wherein said nucleic acid sequence [that] encodes ROC1 having the amino acid sequence given herein as **SEQ ID NO:2**.

4. (Amended) An isolated polynucleotide according to Claim1, wherein said nucleic acid sequence has [which is a DNA having] the nucleotide sequence given herein as **SEQ ID NO:1**.

5. (Amended) An expression vector comprising an isolated polynucleotide [a nucleic acid] according to Claim 1.

13. (Amended) An antisense oligonucleotide complementary to the nucleic acid sequence encoding ROC1 [polynucleotide] of Claim 1 and having a length sufficient to hybridize thereto under physiological conditions.

16. (Amended) A method for producing a protein [comprising the amino acid sequence of **SEQ ID NO:2**, or a fragment thereof], comprising

(a) culturing a host cell containing an expression vector comprising a polynucleotide comprising a nucleic acid sequence encoding a protein comprising the amino acid sequence of **SEQ ID NO:2**, or a fragment thereof, [containing at least a fragment of the polynucleotide sequence encoding ROC1] under conditions suitable for the expression of the protein; and

(b) recovering the protein from the host cell culture.

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